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	)	
In the Matter of	)	
	)	
Structure and Practices of the Video Relay	)	CG Docket No. 10-51
Service Program	)	
	)	
	)	

In its original comments, Convo Communications, LLC (“Convo”) emphasized that the greatest opportunity for functional equivalence in VRS lies in leveraging frequently-refreshed hardware that can be bought commercially, along with Video Relay Service (“VRS”) software that incorporates improved technologies and features more quickly than proprietary videophones.

In these reply comments, Convo will focus on one aspect of its original filing and filings by other commenters: leveraging off-the-shelf software solutions to provide VRS. Commenters have taken differing positions on this particular aspect and Convo wishes to bring focus to the discussion.



## **Off-the-shelf software in VRS**

Convo noted in its original filing that no off-the-shelf video communication software solution, in its default configuration, meets all of the requirements necessary for VRS use. Convo also notes that other filers have made similar comments.<sup>1</sup> VRS providers must spend time and effort modifying such off-the-shelf solutions so that they are VRS-compatible.

However, as Convo noted, VRS users often use such off-the-shelf solutions in non-VRS situations, as such solutions often create new opportunities for communication. In addition, off-the-shelf solutions often bring new features and functions to market far more quickly than can VRS providers with more limited resources. For instance, iChat allows up to four people to communicate via video at the same time – a feature missing from videophones and VRS software.

To enable providers to bring new and emerging technologies to VRS, the FCC should ensure that providers have the ability to leverage off-the-shelf software. Convo reiterates that it believes the Commission should encourage the use of off-the-shelf software as long as VRS providers can meet Commission requirements governing their use, such as 9-1-1 access and ten-digit telephone number ("TDN") compatibility. If

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<sup>1</sup> See, e.g., CSDVRS, LLC, *Comments of CSDVRS, LLC*, CG Docket No. 10-51 (filed 4/1/2011) ("Due to the usage of names and/or user ID's of Skype, AOL IM, Yahoo IM, and other video chat software, they are not currently equipped to support 10-digit dialing," and "[i]t must also be noted that none of the existing off-the-shelf technologies automatically supports E911.")



providers can meet such requirements, the use of off-the-shelf software will only serve to expand the boundaries of what is possible with VRS.

### **Convo Anywhere**

Convo Anywhere, Convo's web-based VRS solution, is a prime example of how off-the-shelf software can be used to introduce new features and functions to VRS.

Convo Anywhere requires no download or install, and simply requires deaf and hard of hearing callers to open a web browser on a computer of their choosing (*e.g.*, a computer running Windows, Mac OS X, or Linux,) and enter Convo Anywhere's URL:

anywhere.convorelay.com. Convo Anywhere therefore is platform-neutral, can run on any operating system, and leverages Adobe's Flash platform. According to RIA Stats (<http://riastats.com>), Adobe Flash is installed on over 97 percent of Internet-connected machines, making it one of the most ubiquitous technologies in the history of computing.

The use of Flash – a commercially available software solution – provides benefits. For instance, Flash is capable of sending video through just one port number – port 80 – as opposed to the majority of other solutions available on the market, which require multiple ports to function. As such, Convo Anywhere can be used to make VRS calls even in locations with strict firewall policies in place, such as the workplace, or in government agencies, without the need for time-consuming and difficult-to-obtain special firewall permissions.



In addition, one of the critical needs Convo Anywhere was able to fulfill is immediate access to 9-1-1 for deaf people through a 9-1-1 hot button. Convo believes that Convo Anywhere was one of the first, if not the only, VRS IP app at the time of its release to offer such a feature. Since Convo Anywhere works on any Internet-connected machine with Flash, deaf people have the option of making 9-1-1 calls from a wider range of locations than was previously possible. Convo has since introduced quick 9-1-1 access in all of its products, and is proud of this achievement.<sup>2</sup>

Convo Anywhere has also introduced two additional innovations: 1) the first-in-the-industry capability for VRS users to hang up VRS calls themselves, rather than having to wait for the VRS Communication Assistant (“CA”) to hang up the call, and 2) consistent dial-through capability, allowing VRS users to privately enter confidential data such as account numbers or credit card numbers when faced with automated telephone menus, without having to rely on the CA to relay such information. Convo Anywhere’s dial-through capability continues to function regardless of how many sequential calls a VRS user makes.

Taken together, all of Convo Anywhere’s innovations represent a significant advance in what is possible in VRS, and demonstrates the ability of off-the-shelf solutions to enhance the VRS experience more quickly than can proprietary videophones.

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<sup>2</sup> See Exhibit A.



### **Competition and new and emerging technologies**

As mentioned earlier in this filing, Convo believes the Commission should encourage the use of off-the-shelf software as long as VRS providers can meet Commission requirements governing their use, such as 9-1-1 access and ten-digit telephone number ("TDN") compatibility. The use of off-the-shelf software effectively guarantees that VRS users are not tied in to certain providers by such providers' proprietary videophones. Further, the use of commercially available hardware (*e.g.*, computers, smartphones, or tablets) allows VRS users to choose between any VRS provider that offers an IP-based VRS application. Ultimately, giving VRS users the freedom to choose which VRS software best fits their needs will heighten competition among, and incent further innovation by, VRS providers incorporating new and emerging technologies.

David J. Bahar

A handwritten signature in black ink, appearing to read "David J. Bahar", with a long horizontal flourish extending to the right.

Director of Government and Regulatory Affairs  
Convo Communications, LLC



Exhibit A



Access to 9-1-1 emergency is available by contacting 911.convorelay.tv on any videophone and as a one-step action at all Convo products.

### Products

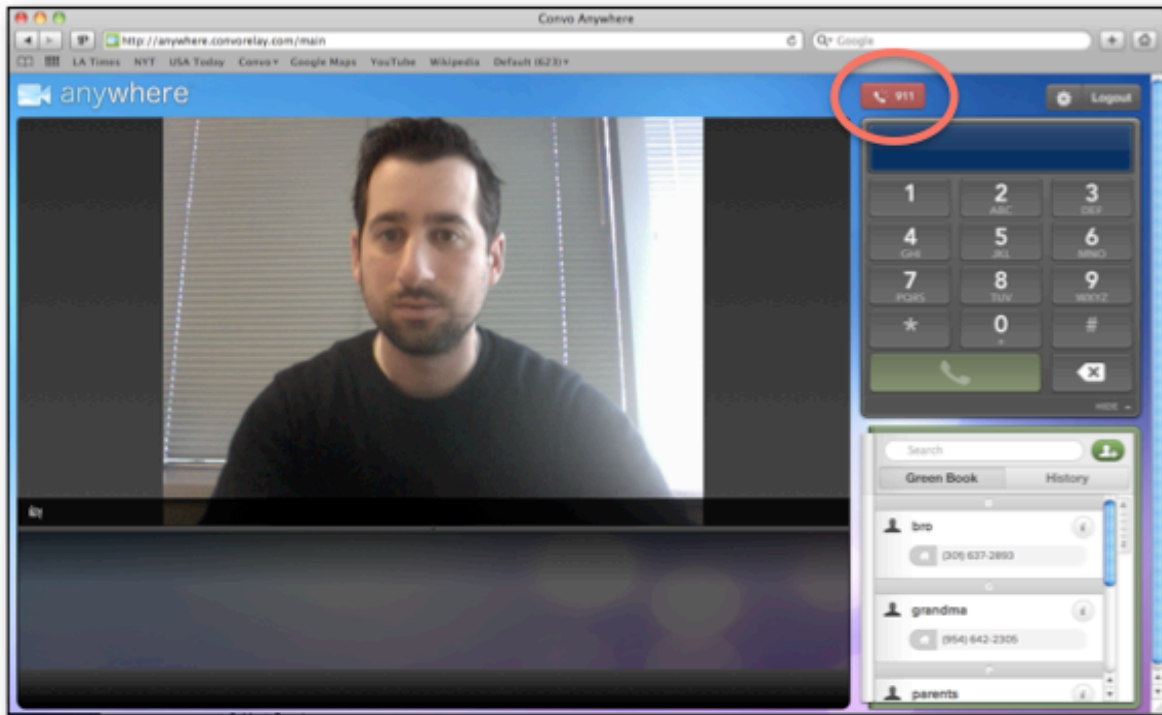
- Convo Anywhere
- Convo Desktop
- Convo Mobile
- ConvoIM (AOL Instant Messenger, iChat)

### Convo Anywhere

*No sign-in: 9-1-1 emergency can be readily accessed via the red button at the lower right corner.*

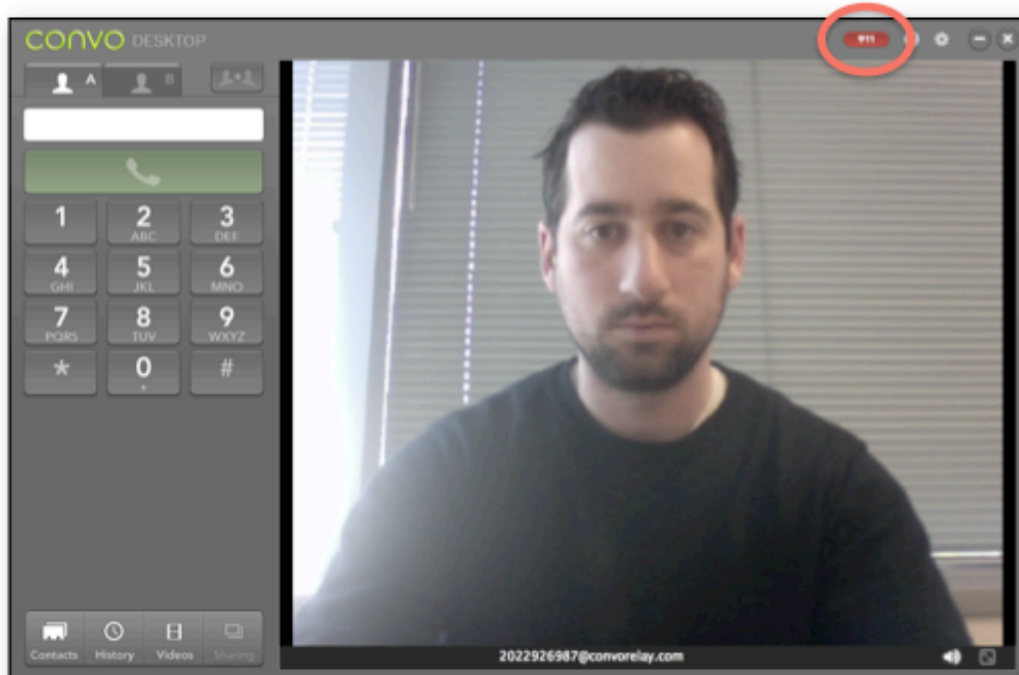


*After signing in: 9-1-1 emergency can be readily accessed via the red button near the upper right corner.*



### Convo Desktop

*9-1-1 emergency can be readily accessed via the red button near the upper right corner.*





## Convo Mobile

*9-1-1 emergency automatically populates the contacts list (speed dial) as the top-most entry.*



## ConvoIM

*9-1-1 emergency can be readily accessed via inputting **911** as the number to dial.*

